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cut

one magnet having a "north" polarity exerting a magnetic field on its corresponding reed switch. In this configuration, if a cartridge is inserted into the printer with no magnetic elements to counterbalance the existing fixed magnets (A and B), the reed switches will not deviate from their normal, biased positions. This condition indicates to the printer that a non-recognized cartridge has been inserted into the printer.

IN THE CLAIMS:

Please cancel Claims 4, 5, 8, 10 and 11 without prejudice or disclaimer. Please amend Claims 6, 7 and 9 as follows:

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1 ~~6.~~ (amended) A printer cartridge identification system comprising:  
2 a printer cartridge having a plurality of magnetic elements disposed opposite a  
3 plurality of magnetic field detecting switches located on a printer; and,  
4 a printer having the plurality of magnetic field detecting switches corresponding  
5 to the plurality of magnetic elements on the printer cartridge and a plurality of fixed  
6 magnetic elements adjacent the plurality of magnetic field detecting switches, each fixed  
7 magnetic element biasing one of the magnetic field detecting switches to a first position;  
8 and,  
9 where the magnetic field detecting switches cooperate to define a printer cartridge  
10 identification code.

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1 ~~7.~~ (amended) The printer cartridge identification system of Claim ~~6~~ wherein the  
2 magnetic elements on the printer cartridge are of a size and strength to counterbalance the  
3 fixed magnetic elements on the printer when the cartridge is located in the printer.

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1 ~~9.~~ (amended) A printer cartridge identifying printer comprising:  
2 a magnetic field detecting switch adjacent a printer cartridge port and adapted to  
3 switch from a first position to a second position when a magnet on the printer cartridge is  
4 brought in proximity with the magnetic field detecting switch;  
5 circuitry on the printer for evaluating the position of the magnetic field detecting  
6 switch and determining whether the cartridge in the printer is of a specific type; and,

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*A3 cont*  
7 a fixed magnetic element adjacent the magnetic field detecting switch to bias the  
8 magnetic field detecting switch to a predetermined position.

Please add the following new Claims 12-15:

*A4*  
1 <sup>12</sup>~~12~~ A printer cartridge identification system comprising:  
2 a printer comprising a plurality of magnetic field detecting switches adjacent to a  
3 plurality of fixed magnetic elements on the printer; each fixed magnetic element having a  
4 magnetic field of a predetermined polarity and each magnetic field detecting switch  
5 having a first biased position and a neutral position; and,  
6 a printer cartridge having a plurality of magnetic elements; each magnetic element  
7 having a magnetic field of identical polarity to a corresponding fixed magnetic element  
8 on the printer, whereby the magnetic field of the magnetic element on the printer  
9 cartridge interacts with the magnetic field of its corresponding fixed magnetic element on  
10 the printer to allow return of the adjacent magnetic field detecting switch to the neutral  
11 position from the first biased position.

1 <sup>13</sup>~~13~~ The printer cartridge identification system of Claim <sup>7</sup>~~12~~ where a  
2 combination of magnetic field detecting switches define a printer cartridge identification  
3 code.

1 <sup>10</sup>~~14~~ The printer cartridge identification system of Claim <sup>7</sup>~~12~~ where the magnetic  
2 field detecting switches comprise reed switches.

1 <sup>9</sup>~~15~~ The printer cartridge identification system of Claim <sup>8</sup>~~13~~ where the printer  
2 further comprises circuitry for evaluating the printer cartridge identification code by  
3 reading the position of each magnetic field detecting switch.